

**Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-4 (cancelled).

5. (new) A system for aiding the preparation of operation and maintenance plans for a power generation installation, in which plant data are obtained from a plurality of power generation units, for the every plurality of power generation units power generation efficiency for the concerned power generation unit is calculated in real time by making use of the obtained plant data and design data of the concerned power generation unit and operation and maintenance plans for the respective power generation units are prepared based on the calculated power generation efficiency.

6. (new) A system for aiding the preparation of operation and maintenance plans for a power generation installation, comprising:

- means for obtaining plant data from a plurality of power generation units;
- means for determining deviation values between process values estimated according to a machine and apparatus model by making use of the obtained plant data and measured data for the every plurality of power generation units; and
- means for comparing between a cost of economical loss caused by a power generation efficiency reduction of the concerned power generation unit calculated

from the determined deviation value and a cost relating to exchange of the machine and apparatus and the parts thereof in the concerned power generation unit.

7. (new) A system for aiding the preparation of operation and maintenance plans for a power generation installation, comprising:
- means for obtaining plant data from a plurality of power generation units;
  - means for estimating process values according to a machine and apparatus model by making use of the obtained plant data for the every plurality of power generation units;
  - means for determining deviation values between the estimated values and measured values;
  - means for calculating a cost of economical loss caused by a power generation efficiency reduction of the concerned power generation unit from the determined deviation value;
  - means for comparing between the calculated cost of economical loss and a cost relating to exchange of the machine and apparatus and the parts thereof in the concerned power generation unit; and
  - means for preparing operation and maintenance plans for the respective power generation units according to the comparison result.

8. (new) A system for aiding the preparation of operation and maintenance plans for a power generation installation according to claim 5,

wherein failure histories of the machine and apparatus or the parts thereof in the plurality of power generation units are stored in a database, a failure probability of the machine and apparatus or the parts thereof is calculated by making use of the failure histories stored in the database, and an operation and maintenance plan for each of the power generation units is prepared in view of the calculated failure probability.

9. (new) A system for aiding the preparation of operation and maintenance plans for a power generation installation according to claim 6, wherein failure histories of the machine and apparatus or the parts thereof in the plurality of power generation units are stored in a database, a failure probability of the machine and apparatus or the parts thereof is calculated by making use of the failure histories stored in the database, and an operation and maintenance plan for each of the power generation units is prepared in view of the calculated failure probability.

10. (new) A system for aiding the preparation of operation and maintenance plans for a power generation installation according to claim 7, wherein failure histories of the machine and apparatus or the parts thereof in the plurality of power generation units are stored in a database, a failure probability of the machine and apparatus or the parts thereof is calculated by making use of the failure histories stored in the database, and an operation and

maintenance plan for each of the power generation units is prepared in view of the calculated failure probability.

11. (new) A system for aiding the preparation of operation and maintenance plans for a power generation installation according to claim 5, wherein manufacturers of the machine and apparatus or the parts thereof in the plurality of power generation units and superiority with regard to reliability and maintenance capacity of the manufacturers are stored in a database and an operation and maintenance plan for each of the power generation units is prepared in view of the superiority of the manufacturers stored in the database when evaluating the machine and apparatus or the parts thereof.

12. (new) A system for aiding the preparation of operation and maintenance plans for a power generation installation according to claim 6, wherein manufacturers of the machine and apparatus or the parts thereof in the plurality of power generation units and superiority with regard to reliability and maintenance capacity of the manufacturers are stored in a database and an operation and maintenance plan for each of the power generation units is prepared in view of the superiority of the manufacturers stored in the database when evaluating the machine and apparatus or the parts thereof.

13. (new) A system for aiding the preparation of operation and maintenance plans for a power generation installation according to claim 7,

wherein manufacturers of the machine and apparatus or the parts thereof in the plurality of power generation units and superiority with regard to reliability and maintenance capacity of the manufacturers are stored in a database and an operation and maintenance plan for each of the power generation units is prepared in view of the superiority of the manufacturers stored in the database when evaluating the machine and apparatus or the parts thereof.

14. (new) A method of aiding the preparation of operation and maintenance plans for a power generation installation, in which plant data are obtained from a plurality of power generation units, for the every plurality of power generation units power generation efficiency for the concerned power generation unit is calculated in real time by making use of the obtained plant data and design data of the concerned power generation unit and operation and maintenance plans for the respective power generation units are prepared based on the calculated power generation efficiency.

15. (new) A method of aiding the preparation of operation and maintenance plans for a power generation installation, the method comprising the acts of:

obtaining plant data from a plurality of power generation units;

estimating process values according to a machine and apparatus model by making use of the obtained plant data for the every plurality of power generation units;

determining deviation values between the estimated values and measured values;

calculating a cost of economical loss caused by a power generation efficiency reduction of the concerned power generation unit from the determined deviation value;

comparing between the calculated cost of economical loss and a cost relating to exchange of the machine and apparatus and the parts thereof in the concerned power generation unit; and

preparing operation and maintenance plans for the respective power generation units according to the comparison result.